

PROCEEDINGS
OF THE
CALIFORNIA ACADEMY OF SCIENCES
FOURTH SERIES.

Vol. XI, No. 12, pp. 137-144

OCTOBER 15, 1921

XII

CHARACTERS OF EIGHT NEW SPECIES OF NORTH
AMERICAN ANTHOCORIDÆ OR FLOWER BUGS

BY

EDWARD P. VAN DUZEE
Curator, Department of Entomology

1. *Xylocoris umbrinus*, new species

Allied to *cursitans* Fallén, but proportionately broader as in *discalis* Van D.; deep polished black, antennæ rostrum, corium and tibiæ brown or piceous. Length 3 mm.

Head a little shorter and broader than in *sordidus*, about as long as wide including the eyes, polished. Antennal seg. I scarcely attaining apex of head; III and IV equal, each but little shorter than II. Rostrum long, apparently nearly attaining intermediate coxæ. Pronotum as in *discalis*, highly polished, the lobes scarcely distinguished, the posterior minutely aciculate, not transversely impressed; sides straight, rounded to anterior angles, obtusely carinate, this carina reaching to middle of collum. Scutellum nearly flat, highly polished, feebly rugose posteriorly. Elytra uniformly polished, behind the fracture narrower than abdomen; costa feebly arcuate behind the middle of corium, surface with scattering minute pale hairs. Ostiolar canal shorter than in *discalis* and the *sordidus* group of species, bent toward, but not quite attaining, the anterior margin of the metapleura, the angle rounded, apex subacute. Hind tibiæ pale-pubescent, without longer soft hairs.

Color, deep shining black, basal two antennal segments and femora piceous-black; apical two segments of antennæ, rostrum and tibiæ pale piceous or brownish; elytra piceous-brown, clavus, or at least its inner margin, and the cuneus darker; membrane hyaline-white.

Described from one male taken by me at Bryson, Monterey Co., Calif., April 23, 1917, and one female taken from under the bark of an old fir log near Cayton, Shasta Co., Calif., July 14, 1918.

Holotype, male, No. 788, and *allotype*, female, No. 789, Mus. Calif. Acad. Sci.

Type locality, Bryson, Monterey Co., Calif.

Xylocoris californicus Reut., I have taken at Cayton, Shasta Co., Calif., and at Bryson, Monterey Co., Calif. It may be distinguished by the broad lunate and striate area anterior to the ostiolar canal and whitish elytra with the inner and commissural margins of the clavus, apex of the embolium and the cuneus, except its inner angle, piceous. *X. flaccidus* and *discalis* have the ostiolar canal long and curved, with its acute apex at the basal margin of the metapleura, and pertain to the section of the genus with *sordidus* Reut., while *umbrinus* has this canal shorter and more obtuse at apex, thus allying it with *cursitans* Fall.

2. *Anthocoris tristis*, new species

Allied to *dentipes* Champ., but larger, with the elytra, except the clavus, polished; antennæ, legs and base of elytra, deep piceous. Length $4\frac{1}{2}$ mm.

Head shorter, scarcely longer than median line of pronotum; surface minutely shagreened. Antennæ short, stout, scarcely longer than basal width of pronotum; seg. I reaching apex of head; II as long as width across the eyes; III and IV equal, together distinctly longer than II. Pronotum broad, strongly impressed across the disk; sides feebly sinuated, slenderly carinate as far as the collum, the latter broad; posterior lobe minutely rugose, the region of the callosities nearly smooth; scutellum smooth. Elytra rather narrow, polished, the clavus only opaque; membrane much exceeding the abdomen; outer vein indistinct, the others obsolete or nearly so. Rostrum hardly attaining the anterior coxæ; seg. I scarcely longer than broad; III but little longer than the width of the collum. Ostiolar canal short, broad, its hind margin broadly curved, the anterior slightly curved anteriorly. Beneath polished, the prosternum opaque and strongly rugose; ventral segments punctate becoming smooth along the hind margins; anterior femora with a small tubercle at apical third.

Color, deep black, the antennæ, rostrum, legs and elytra to apex of corium more or less piceous with the embolium paler; upper surface sparsely clothed with soft white pubescence; basal third of membrane obscurely whitish.

Described from one female taken in Yosemite Valley, California, in June, 1916, by Mr. Walter M. Giffard. The larger size, polished corium and embolium and the shorter third segment of the antennæ will most readily distinguish this form from *dentipes* Champ.

Holotype, female, No. 790, Mus. Calif. Acad. Sci.

Type locality, Yosemite Valley, Calif.

3. *Anthocoris dimidiatus*, new species

Allied to *nigripes*; polished black, second antennal segment, except its apex, and legs, castaneous; elytra yellowish testaceous as far as apex of clavus; basal half of membrane white; corium entirely opaque or subopaque. Length 3 mm.

Head as long as pronotum and basal lobe of scutellum combined, its length before the ocelli a little greater than width across the eyes; sides parallel to a point nearly one-half distance from front of eye to apex, then suddenly constricted and again somewhat expanded at tip; this character, common to all allied species, is more pronounced here. Antennæ slender, as long as head, pronotum and scutellum as far as the transverse depression; basal segment not attaining apex of head; II as long as head; III and IV subequal, fusiform, a little thinner than II. Rostrum reaching to middle of mesosternum; seg. I attaining anterior line of eye; II touching anterior coxæ. Prosternum deeply impressed across the middle; sides sinuated, the carinate edges not encroaching upon the collum; surface minutely rastrate punctate, the prominent callosities nearly smooth. Posterior lobe of scutellum minutely rastrate. Elytra subopaque over their whole surface, the thickened apical margin of the cuneus only polished; membranal veins moderately and about equally prominent, the inner pair scarcely approaching at base, the outer a little arcuate. Venter very minutely rastrate with base of segments polished.

Color, deep black; femora, apex of second antennal segment and the third and fourth piceous brown; basal two thirds of second antennal segment and tibiae honey-yellow. Elytra yellowish white as far as tip of clavus, becoming black beyond that point, with a pale mark on the thickened apex of the embolium; basal half of membrane milky white, the apical blackish; surface clothed with a few soft pale hairs.

Described from one female taken by me on the Felch Ranch, near Cayton, Calif., July 15, 1918. The long antennæ would seem to ally this species with *sylvestris*, but the opaque elytra and distinct membranal veins indicate closer relationship with *nigripes*, and will serve to distinguish it from *whitei* which it slightly resembles. With the type were taken two immature females, one winged but teneral, the other a nymph with the abdomen broad oval and the elytra short, attaining middle of third tergal segment, black with the scutellar margin of clavus castaneous, base of corium and embolium and narrow membrane white.

Holotype, female, No. 791, Mus. Calif. Acad. Sci.

Type locality, Felch Ranch, near Cayton, Shasta Co., Calif.

4. *Lyctocoris doris*, new species

Allied to *campestris* and belonging to that section of the genus; more elongated and darker in color; piceous-black

with the antennæ, rostrum and legs testaceous. Length 4 mm., width $1\frac{1}{3}$ mm.

Head longer than in *campestris*, longer than median length of pronotum and equal to its width across eyes; vertex with a few coarse punctures anteriorly, smooth about the ocelli. Segment I of antennæ not quite attaining apex of head; II as long as head; III and IV subequal, each two-thirds of second. Pronotum rugose as in *campestris*, the sides a little more sharply carinate and subsinuate posteriorly, the surface depressed across disk behind middle. Elytra narrower than in *campestris*, parallel, opaque, closely punctured; membrane long and narrow, considerably exceeding abdomen; outer veins distinct, others obsolete or practically so. Rostrum attaining middle of hind coxæ; seg. I reaching almost to base of head. Orifices and canal as in *campestris*, the metastethal carina sharp and a little curved; mesostethus with a minute tubercle at base of intermediate coxæ. Anterior femora considerably thickened, fusiform, about twice thickness of intermediate.

Color, a deep opaque piceous-black, becoming a little paler on costal base, behind ocelli and along either side of tylus; antennæ, rostrum and legs honey-yellow or pale piceous.

Described from one pair taken in the cool foggy coastal belt of California, at Lagunitas, Marin Co., April 9, 1911, by Dr. E. C. Van Dyke.

Holotype, male, No. 792, *allotype*, female, No. 793, Mus. Calif. Acad. Sci.

Type locality, Lagunitas, Marin Co., Calif.

5. *Tetraphleps latipennis*, new species

Allied to *aterrima*; black, pronotum, the callosities excepted, and the elytra castaneous brown. Length $4\frac{1}{2}$ mm., width 2 mm.

Head as long as median length of pronotum; vertex broad and convex between the ocelli. Antennæ a little shorter than head and pronotum along median line; seg. I scarcely attaining apex of head; II as long as from tip of head to ocelli; III and IV together rather longer than II, IV slightly exceeding III. Rostrum attaining anterior coxæ; seg. II a little surpassing base of head. Prosternum transversely wrinkled, connate with the collum, obtusely angled between anterior coxæ, its edge obscurely carinate; mesosternum slightly carinate-produced between anterior coxæ, sulcate posteriorly, smooth with sides aciculate almost to anterior margin. Ostiolar canal straight, its margins distinctly elevated to an acute apex. Pronotum broad, sides well arcuated and slenderly carinate; collum broad and well defined, entirely free from lateral carinæ; region of callosities smooth, distinctly elevated; collum and posterior lobe closely punctate. Scutellum roughened but scarcely punctate, the usual median depression distinct. Elytra broad, costa rather strongly expanded at base, nearly straight; surface uniformly but moderately polished, closely punctate; membrane exceeding abdomen by about a fourth its length, the veins distinct, the outer abruptly curved and more prominent, surface with irregular transverse wrinkles which become longitudinal at

apex. Surface clothed with soft whitish pubescence, longer on pronotum and elytra, nearly or quite wanting on base of head, pleural pieces and base of ventral segments; head with six stiff bristles.

Color, piceous black; pronotum, excepting the region of the callosities, and the elytra castaneous brown; membrane smoky, a large basal spot emphasized at apex of cuneus and the borders of the veins nearly to their apex, pale.

Described from 36 examples taken by me from *Pinus albicaulis* at an altitude of 9,100 feet on top of Mt. Eddy, Siskiyou Co., Calif., July 28, 1918. No males or immature individuals were seen. The Academy also possesses a series taken by me at Huntington Lake, Fresno Co., Calif., in July, 1919, at an altitude of 7,500 feet, three taken by Mr. C. L. Fox at Dry Lake Lookout Station near Walker, Siskiyou Co., Calif., June 1, 1920, at 7,000 ft. elevation, and one taken by me at the Biological Station near Nanaimo, Vancouver Island, June 28, 1920, all females. This species seems to be quite typical of the genus *Tetraphleps*, and occurs only on pine so far as my experience goes. I would distinguish this genus primarily by the punctate elytra and form of the ostiolar canal. The membranal veins seem always to be prominent.

Holotype, female, No. 794, Mus. Calif. Acad. Sci.

Type locality, top of Mt. Eddy (altitude 9,100 ft.), Siskiyou Co., Calif.

6. *Tetraphleps furvus*, new species

Closely allied to *latipennis*, a little narrower and more polished with the elytra of a paler and more testaceous brown. Length 4 mm., width $1\frac{1}{2}$ mm.

Head narrower and flatter between the ocelli than in *latipennis*, the apex slightly notched either side the tylus. Antennæ longer and more slender; seg. I slightly surpassing the head; II as long as the entire head; III fully equal to IV in length and somewhat thinner. Rostrum slightly surpassing anterior coxæ; prosternum more flattened with margins more prominent than in *latipennis*; mesosternum less strongly aciculate on sides, ostiolar canal as in allied species. Pronotum more transverse, sides nearly rectilinear, a little rounded at anterior angles, slenderly carinate; region of callosities scarcely elevated; surface closely, obscurely punctate. Elytra parallel, costa subsinuate, veins less distinct and the punctures more distant and obscure than in *latipennis*; membrane longer, exceeding abdomen by about half its length, outer veins less abruptly curved, the inner less prominent; surface with obscure transverse wrinkles which become longitudinal at apex. Whole surface of body clothed with a pale pubescence, more highly polished than in *latipennis*.

Color, piceous black; pronotum and elytra testaceous-brown, the anterior disk of pronotum darker and embolium paler; membrane brown with a transverse row of pale marks at apex of cuneus.

Described from four males taken by me on a small (cedar?) tree at Ward, Colorado, July 1, 1903, at an altitude of 9,300 feet. With these were numerous young, so apparently the males were reaching maturity before the females and may perish much earlier which would account for the scarcity of males in all species of this genus as represented in collections.

Holotype, male, in collection of the author, *paratypes* in his collection and in that of the California Academy of Sciences.

Type locality, Ward, Colo.

My notes on the Provancher collection indicate that the type of *Tetraphleps canadensis* Provancher, was in poor condition, leading me to place it in genus *Lyctocoris* but a study of these allied species now convinces me that it might have been rightly placed after all. It should not be difficult to procure additional specimens from pines about Cap Rouge, Quebec, which would soon settle the matter.

7. *Tetraphleps lepidus*, new species

Smaller and narrower than *latipennis* with more slender antennæ, seg. II being broadly pale in middle, the pronotum entirely black and ostiolar canal distinctly curved apically. Length $3\frac{1}{2}$ mm.

Female: Head as long as half the posterior width of pronotum, rounded at apex, the clypeus slightly exceeding the cheeks, base of vertex polished. Seg. I of antennæ distinctly shorter than apex of head; II equal to median length of pronotum, scarcely thicker at apex; III linear, one-half length of II; IV fusiform, equal to III. Pronotum closely, finely punctured, callosities polished; carinate sides a little expanded anteriorly but scarcely reflexed, straight, attaining middle of collum. Elytra slightly widened to apex of corium; membrane exceeding the cuneus by two-thirds its own width, subhyaline and somewhat opaque and brownish at base and apex, leaving a broad hyaline band at apex of cuneus. Rostrum attaining posterior coxæ; seg. I passing anterior angle of eye. Ostiolar canal distinctly curved anteriorly at apex. Whole upper surface moderately polished, closely minutely punctate except for the smooth areas on vertex and callosities, clothed with soft appressed pale hairs with apparently four longer stiff hairs on head.

Color, deep piceous or black; seg. II of antennæ, except base and apex, elytra, apex of femora and the tibiæ rufo-testaceous; sometimes base of first antennal segment, gula, and coxæ more rufo-piceous and the subcostal portions of the elytra may be infuscated.

Male: Darker in color with the second antennal segment thicker and black or nearly so, and the elytra piceous with a pale median dot on apical margin of corium, the membrane entirely fuscous.

Described from five males and 24 females taken by me on lodge pole pine at Huntington Lake, Fresno Co., Calif., July 24, 1919, at an altitude of 7,400 feet, all in the Academy's collections.

Holotype, male, No. 795, *allotype*, female, No. 796, Mus. Calif. Acad. Sci.

Type locality, Huntington Lake, Fresno Co., Calif.

Our five North American species of this genus may be roughly distinguished by the following key. *Xylocoris uniformis* Parshley is unknown to me in nature and the characters are taken from the description.

Rostrum short, not attaining anterior coxæ; size large ($4\frac{1}{2}$ mm.); pronotum castaneous with black callosities. Calif.

latipennis, new species.

Rostrum at least attaining anterior coxæ; length 4 mm. or less 1

1. Ostiolar canal distinctly anteriorly curved at apex; rostrum attaining posterior coxæ. Calif. *lepidus*, new species. 2
Ostiolar canal straight

2. Rostrum scarcely surpassing anterior coxæ; membrane surpassing cuneus by three-fourths its width. Colorado *furvus*, new species 3
Rostrum attaining middle of mesosternum or longer

3. Black with the elytra castaneous-brown varied with darker; membrane with a pale spot either side, another at base and pale along the veins. Eastern States, Canada. *americana* Parsh.
Light brown, almost uniform; pale markings on membrane mostly obsolete. New Hampshire. *uniformis* Parsh.

8. *Melanocoris nigricornis*, new species

Allied to *obovatus* Champ., but with the antennæ longer and entirely black; piceous-black; elytra castaneous-brown. Length 4 mm., width $1\frac{1}{2}$ mm.

Head as long as median line of pronotum; apex broadly truncate, almost clavate; vertex broadly convex, the ocelli prominent, red. Antennæ about as long as median line of head and pronotum combined; segment I nearly attaining apex of head; II about three times length of I; III thinner and hardly longer than IV, these two together as long as II. Rostrum not passing anterior coxæ. Pronotum broad and unusually flattened; collum not distinguished; sides nearly straight, broadly expanded and rounded toward anterior angles; surface minutely transversely rugose, impressed across the middle. Elytra opaque, not visibly punctate; membrane passing abdomen by nearly one-half its length, very obscurely wrinkled, the veins about

equally prominent, the inner pair approximate at base and the outer sinuated as in *Tetraphleps*. Ostiolar canal straight and prominent at apex, about as in *Tetraphleps*. Whole surface opaque; superiorly clothed with fine pale pubescence which shows an inclination to serial arrangement about the clavus. Legs and antennæ minutely pubescent.

Color, dull piceous-black becoming obscure castaneous on the legs; elytra dull castaneous-brown, paler on the embolium and outer margin of cuneus; membrane slightly enfumed with an indistinct paler spot within the apex of the cuneus.

Described from three females, one taken by Mr. Walter M. Giffard at Summit, Placer Co., Calif., August 24, 1916, at an elevation of 7,000 feet; another taken by me on pine trees on Mt. Tahquitz above Keen Camp, Riverside Co., Calif., June 9, 1917, at an elevation of 7,000 feet; the third taken by Mr. Ralph Hopping on Jeffrey pine at Monmouth, Mono Co., Calif., May 9, 1919. The Summit specimen is the insect recorded by me as *M. obovatus* Champ., in Proc. Calif. Acad. Sciences, Ser. 4, VII, p. 262, 1917.

Holotype, female, No. 797, Mus. Calif. Acad. Sci.

Type locality, Summit, Placer Co., Calif.